SEQUENCE LISTING

- <110> Mendrick, Donna
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- <120> Molecular Toxicology Modeling
- <130> 44921-5038-US
- <140>
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- <150> US 60/222,040
- <151> 2000-07-31
- <150> US 60/222,880
- <151> 2000-11-02
- <150> US 60/290,029
- <151> 2001-05-11
- <150> US 60/290,645
- <151> 2001-05-15
- <150> US 60/292,336
- <151> 2001-05-22
- <150> US 60/295,798
- <151> 2001-06-06
- <150> US 60/297,457
- <151> 2001-06-13
- <150> US 60/298,884
- <151> 2001-06-19
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- <151> 2001-07-09
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SEQUENCE LISTING

- <110> Mendrick, Donna Porter, Mark Johnson, Kory Castle, Arthur Elashoff, Michael Gene Logic, Inc.
- <120> Molecular Toxicology Modeling
- <130> 44921-5038-US
- <140>
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- <150> US 60/222,040
- <151> 2000-07-31
- <150> US 60/222,880
- <151> 2000-11-02
- <150> US 60/290,029
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- <150> US 60/290,645
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- <150> US 60/295,798
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caggitation authorized total total agricultural designation and acceptance and acceptance and acceptance and acceptance acceptance and acceptance acceptan
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<220>
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<213> Rattus norvegicus

<211> 678

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<213> Rattus norvegicus

<211> 453

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<211> 483
<212> DNA
<213> Rattus norvegicus
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<212> DNA
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<212> DNA
<213> Rattus norvegicus
<220>
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<213> Rattus norvegicus
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<210> 188
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<213> Rattus norvegicus
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cctgtgctgc tcccaaggga gaggttctgt ttgggtgtgg gataaatcta aacaagcata 480
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tcaaatacaa aaaccaggaa acaaatcacc atccttcaac aatttgagca aagatagaat 180
gaatgcctaa ggaacaacaa agatggactt gcagaggatg ggctgtttac agacgtcaag 240
caccataaaa aaaaaaaaaq aaqcacaaat qcqtqqqttt ccaqqtatat acaqtaaqtt 300
gaacctttgg cactaggaac cagggcatct catcacgtag cattaacaca tattagaaaa 360
ctgtgtagtg tcaaagggat agaaccacca gcattcaagc aatgttgtca actaggcaat 420
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<210> 224
<211> 591
<212> DNA
<213> Rattus norvegicus
<220>
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ccagcaagge cttgagggca gactggacct atagactatg tgtattgaga gagagagaga 300
gagagagaga gagagagag gagagagaga gagaggaata aaaaaaataa gagaaatatc 360
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gatgaagatc gagttetttg geggeecagg tgteaageea etgaaacage aagteetggg 480
gacttaagga tttcattctc cagcccagag cttagcagca ttaacgggag cacaagttac 540
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<211> 614
<212> DNA
<213> Rattus norvegicus
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ttaaaaatac aacttattcc ttttaagtta ttacttaaac tatctagatc ttctacatat 180
taaaatagaa gtgagaaaat agatctttgg aatctagagt ctagagtgaa ggctaaaaac 240
ctgatatgga attggcatga tcaatccaga ctacggctaa aatgcaagag aacaggtcag 300
gagttgatca aagtttcaaa atttgtcaca tttggtggaa aaataaaaca ctaaatgcat 360
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aacattcaac ttctgagctc atttctagct cccgaaaggg ggttgcaaaa tccaatggga 480
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<212> DNA
<213> Rattus norvegicus
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<212> DNA
<213> Rattus norvegicus
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tgtacataca accagcaaag agaaaatcta catctgtgac ctaagacaca gaattcacac 180
cctgcttctc cagccaggct aacagtgaga tcacagtcag tttcctqaqt qctqqqqcca 240
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cctttcctgt gagtccatgg aaccacgtta acaaaagaac gagcaggcag aaggggagtc 480
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gactgaacat ttacccaagg cggatcactg tcactgctat tcattcaaaa cagacagaaa 180
tcctgagtgt gggttctgag aagacagttg tgcctgtctt gatggtgaca atttacatcc 240
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aaagagctgg tagagcagca ggcgtttgtc gaaccctgga gcctttggga tcttctgatg 180
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gtaggcagtg aagaatgatc tggggaaccc cccaag
<210> 230
<211> 487
<212> DNA
<213> Rattus norvegicus
<220>
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<221> unsure
<222> (1)..(487)
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caaatacaca tgtcaatata tatttcataa actactaaaa aataaaaccc tttatcctct 180
gaggttattg atgtgtccta ggtctccaac acatctcatt aaacagtaag ttctattcat 240
cttcatgaat gaggtgggaa ctagactaaa aaataggatt ttaatccctg aggtgtcagt 300
taaaatgcag aggttgccaa gattttttt ttcatttaaa aattagcttt aaataattag 360
catggatcat gctatctcaa tcaaaaccac ttcctctaca cggagtcctt tagaaaatta 420
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<212> DNA
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<220>
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<400> 231
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gcgccctgca gcacactcct gttctcctgg gctcttcgga tcaggtagga tatcacctct 180
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cccaqctccc acatgctgca gaaagggtca cattgtcaat ccagagagtg gctacagcgc 360
ctcgttgcct ggcgaatgga ttcttcattg tgggaagcca catgaggtgg caccggggac 420
cgtggttgga cac
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<211> 443
<212> DNA
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<220>
<223> Genbank Accession No. AA892128
<220>
<221> unsure
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aaatacagtg ccaaggtcct gagtccactt tgcaagaatc ttcttcacat tcacggaaag 180
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gacactggcc cacctgctgg ccagtgtctc ccacttcaca cacctaaacc aagctcaaga 300
caggaaggct gagccgtgaa gagcatcncc acancetete caetggcccg atagetettt 360
cocqccctc ccagttqtcc tgagaaaaat cagatttqtc acagaaaact gacattccta 420
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<210> 233
<211> 439
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AA892146
<400> 233
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gagacccacc cttggagcct gggggcagac ctggagcact ccctaccttc aggggtatga 240
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<211> 632
<212> DNA
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<220>
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gttctggtgg gcgcgctgaa tgcagttgaa catatgccca ttctcaggat ctgtgctgta 480
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<211> 637
<212> DNA
<213> Rattus norvegicus
<220>
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<400> 235
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cctacacatt tctggtgtag cacattttca ttagtattct atgtaaaagg attcaggttt 240
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<213> Rattus norvegicus
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cagtgttttc tctgattggg tttcataagc accagtaata aagagtaata aaattaataa 180
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<211> 591
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AA892395
<220>
<221> unsure
<222> (1)..(591)
<223> n = a or c or g or t
<400> 238
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cegetteatg aaagetteet gngttgeett ettgtttgea geettgeege eecaageage 540
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<212> DNA
<213> Rattus norvegicus
<220>
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<220>
<221> unsure
<222> (1)..(498)
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<400> 239
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<211> 583
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AA892520
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caacagagct ctgggaaggc aggagcctcc tagatagcaa agggaatgtg cttggagttt 360
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cactteggte ceagaatgag acceageagt gteteceaga actegggetg atceagtata 420
ctgcctcttc attctccacc actgacagag ataggccagg ccccagacca cagtaaaaac 480
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<400> 242
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<210> 243
<211> 465
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AA892561
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<213> Rattus norvegicus
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<211> 406
<212> DNA
<213> Rattus norvegicus
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 <213> Rattus norvegicus
 <223> Genbank Accession No. AA900863
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 <211> 447
 <212> DNA
 <213> Rattus norvegicus
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<223> Genbank Accession No. AA924236

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<223> Genbank Accession No. AA924460
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cctcactgcg cacacctgcg ggcacctgga cttcacagca gaacgagtgc cctgcaaagt 180
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tcttgggaga taccagttcc cctcccccc tccagagttc cagcatttgt tgtggttaag 180
qaaaccaaca gcataaagga aagaaacatc ttcctgctcq gatggagtct tccttcccag 300
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catctaatta ggaggcgtgc tgtgcggtgg agaagcacaa cttcagagtg tatggatacg 360

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tattactaac actgeteacg gaggeaagee tgattetace tecaceggaa ceacetacee 180
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<213> Rattus norvegicus

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acaaagcagg gaatcatcag atttggtctc ggaggtaggg gagggaaaca gcaggaatcc 180
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ctaaacccca gagctgtccc tgtccacttt catgtatgct aaggacctct ccctggcagt 180
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tggacaggtg tgtcatctgc ctgcaatccc agcactttct ctatagaggc aagagggtaa 300
qqaqttcaaq qccaqcctca qctacqtqqc aaattcaaaq qccqcctttq gttaccccag 360
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<211> 705

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tggcagctct agcccttcta tgtaggagag ggacctctgt gaggccggct catttgcctt 360
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gttggttggt ctttatctga tattccaatc gccagg
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<210> 366
<211> 664
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AA945076
<400> 366
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actictatgaa tticaaggica gittiggtata catagtgagt tgcaggacag gcaggactac 180
atagcaagac cctgcttcaa aaaaacaaga ataccagtga agaagcatta atgcactatt 240
tqttttatgg atcaattgga gaacaaaatg tggagatgtt ggcatcacca tgaaagagca 300
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tgcatgtgaa caagtgttaa aaggtgactt gtgtctgctg aaacatctct gtttactgaa 600
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ttta
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<211> 648
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<213> Rattus norvegicus
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<223> Genbank Accession No. AA945090
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ttgtatgaat gggcttttat ttttaactga gggcctttca acccccaaca tctcagtaat 240
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acagecaaac etttgacate tgtgacaace agtgaagaaa gactacetag ggetecagte 600
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<210> 368
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<212> DNA
<213> Rattus norvegicus
<220>
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gtcccaagtg gactagacac attcctttca aacacagtga gtgccacaaa acagccagac 240
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attttctcaa cacggcaaat ccaaacccca tgtttctctg ggcatttccg gcatttcaaa 420
gcccagcgca cactgtaaga gccactgtct taaggaaatc taaacagaag acaggttaat 480
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gttttctttt taacagttaa tataattcca ggatgcaagt ccatttcttt ctagaaggtt 660
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<210> 369
<211> 352
<212> DNA
<213> Rattus norvegicus
<220>
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ccgtgaagtt taaaaataat ctttatagta aagtgtcttc agagcaccat catttgaaca 180
gaagatattt tacatatcag agttcatctt tggccttttt cctatggcat gtgcaaggga 240
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<213> Rattus norvegicus
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<223> Genbank Accession No. AA945533
<400> 370
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cagtgtcaac agatatctgt cccattcact caaccttaat tttagatatt tggggagatt 180
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catagtggga cggtctcaaa aattatttga acaggtactt gagacatgtg agatgatgat 180
gtggacagat atgactagca ccctcaggtc ctccccaggg tacagcaaaa ataatcacaa 240
accaacattc tttaatcaga aaggcacttg agggccccta cagagtctta cacaagagca 300
gccctgcgga ttcccactca gccaccctcc cttcccatcc ggctcagagt tcatcgtgac 360
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<213> Rattus norvegicus
<223> Genbank Accession No. AA945596
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gttttcaatg tgtacatgcg actgtatgcc agggtaaact ttctgcaggg gcagcaaggt 300
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acagccatag ctgtca
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<210> 373
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<213> Rattus norvegicus
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<223> Genbank Accession No. AA945601
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ctcataaaac ctaaataaag attttaagtc gatacaacat gagttctttt aagtgaccag 240
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caaactcagc agaaatgaaa aatccattct tacaagtttt ttaaaaattac tcttcacaac 480
tgctgtatga aaacaaccac agagacagtt tggaaagtct tctggaaatg cttacagata 540
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gtottcagtt gtgttcgtta gcatggtttc atccttagca atctccattc atcaagatgg 240
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<212> DNA
<213> Rattus norvegicus
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<211> 560
<212> DNA
<213> Rattus norvegicus
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aagacaatct atctcatctc agaattgttt tcctcaagaa gtctcatgta tccttggctg 480

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qcctcaaccc tqccaqqtaa ctqatqqtga ccttgaatqc ctqatcctcc ataacacttt 540
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<212> DNA
<213> Rattus norvegicus
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<220>
<221> unsure
<222> (1)..(630)
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<213> Rattus norvegicus
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<210> 382
<211> 476
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AA946187
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<210> 383
<211> 465
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AA946189
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<211> 532
<212> DNA
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aagtgaacag gacagetgca geteaggggg ettggtgcca ggcatatgcc cacacccacc 300
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<211> 658
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<213> Rattus norvegicus
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<222> (1)..(658)
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tgctgcgaac cgccagcccc tccagtccag ccccttccag ccagctctca ccaggcctcg 180
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taaacgttct gttactacta atcacatatt ctcttgtaaa ccctgaaaaa tttccctgta 240
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<212> DNA
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atatcttcat ttacaataat caataaataa gagcgcacat tcgtacattt tttttacaaa 240
gatecetttg tttttttat aaagetataa etatgeacag etaaatagae aaaataagee 300
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atggtcactt ccattgtact gtcattcacc taacagcagt agagatccca ggagtagcac 240
ccaaaactca ggtgccccac agaggacaga agcaacagca gaataatatg ctgagcagta 300
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<210> 418
<211> 328
<212> DNA
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<220>
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ccagecetee tggggagaaa gtagetteee egtgeteeaa ggaetaagee teteeteaac 180
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cccaccccaa cctcgtgtcc cagggcccaa ggcttcttgg taggcctctc tggaagtcag 240

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tecqcqqqct ccctgaggat aqqqqttttc ctqcagctga gctgggtttt ttgggggagg 300
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<212> DNA
<213> Rattus norvegicus
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<221> unsure
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gtttttttgt tgaaaggagt gggcgggtgg gtgggggacc gggatgaggg cagaaccccg 180
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<211> 477
<212> DNA
<213> Rattus norvegicus
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gccatattat tcattaagca ttaattaaag aacagcagga taattactag gatcatcaat 240
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acggtgtaca gcatctgttg gaaaaatggc tgcatgggca ctttaaggcc aacttataaa 180
                                                                187
taaaaat
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<211> 281
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<213> Rattus norvegicus
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cctgaggctg ttagactttg gaggtggcat agcctttctc acctggactg cagggcctgg 240
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<212> DNA
<213> Rattus norvegicus
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tccacccacg aggtgctaat gtgtgttgtt ctctagaaga ggtaagtggt tgtctgtgtg 180
gccatccgca aaggggacag aatggacggg cttgtaggat ccaagtctga aacgacagca 240
aattatttcc actataaatt ttccaattcc atqtaacatg cctgttgttg aaaagattcc 300
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<213> Rattus norvegicus
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cageteagag tggtgtgegg etgeeteaga tatgagetge aaggetgeee ttggtgetgg 180
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caggetgtgg etectggeac actgeacage tggaagatea cattgaetgt cettgtgteg 360
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<212> DNA
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<223> Genbank Accession No. AA964336
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tggctcacac agttcaattc atcagaactg tgctcagtag ccaggtgtcg aattattgca 240
caagettgeg ggeccageac gtteeeteea ggeagegagg teteetgeet cattetagea 300
tcaggaccag aaagtcagta ccagatttta cagtcacatt tatggaatcc ataacaaact 360
taatttactt gtctaccaac ctactctcgt tagaggtccg cagatgcact aattggtaac 420
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<211> 363
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AA964368
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<213> Rattus norvegicus
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ggggetetac acttcagega cagegtataa ttggggtttc ctggctggat ccgcagetet 180
gccaaaatcc aaatgccatt agtgagcttc agggactggt acagcatgtc ctgccctcc 240
acatteetet tggegatagt gtaaacattg ttgttttgca acttgetgga aactgtgtca 300
qcqtttaaat qacactcctt aatctqaaat tqqaqctcat tttcattqqq aatatccttc 360
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<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AA964455
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<223> n = a or c or g or t
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gcaaggggca agcgtgacag acactggata gatgtttcta gaaagcagtt catttcacag 420
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<211> 367
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<213> Rattus norvegicus
<220>
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cagagtgagt acagggcctc gggtagcctc gagcgctttc tggaatctgg aattggccct 360
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cgtgccg
<210> 430
<211> 537
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AA964688
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<210> 431
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<212> DNA
<213> Rattus norvegicus
<220>
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<211> 404
<212> DNA
<213> Rattus norvegicus
<220>
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<213> Rattus norvegicus
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<212> DNA
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<223> Genbank Accession No. AA965075
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<210> 435
<211> 498
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AA965122
<220>
<221> unsure
<222> (1)..(498)
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ataaacccta cagaatgaga aatgtacaaa gttgttgggt ggctgctggc ctcttgcctc 240
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gagetgeaaa atetteeetg ngggaeaaga acagtettge teacceagea gatgtgeeaa 360
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<210> 436
<211> 519
<212> DNA
<213> Rattus norvegicus
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<220>
<221> unsure
<222> (1)..(519)
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tggccanagg aagatgaaca tggattcaga agtccaaaga atgcagttct ttgtgcccaa 480
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<210> 437
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<212> DNA
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<213> Rattus norvegicus
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cagctaggac cagcccacca caaggtacgc gtggaaccaa agtgcttaga ggcttcggat 180
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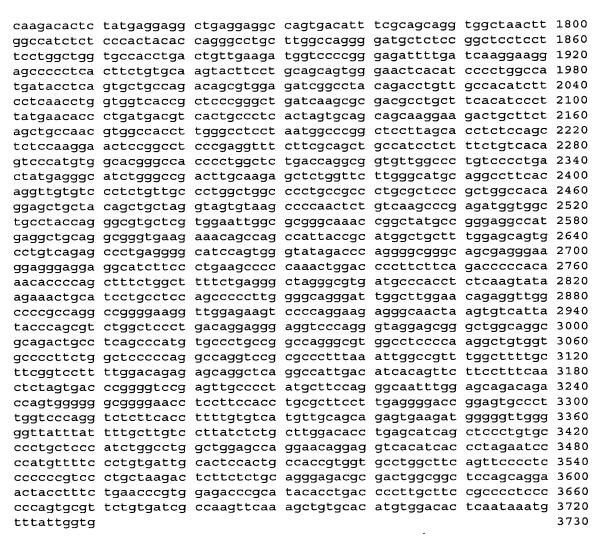
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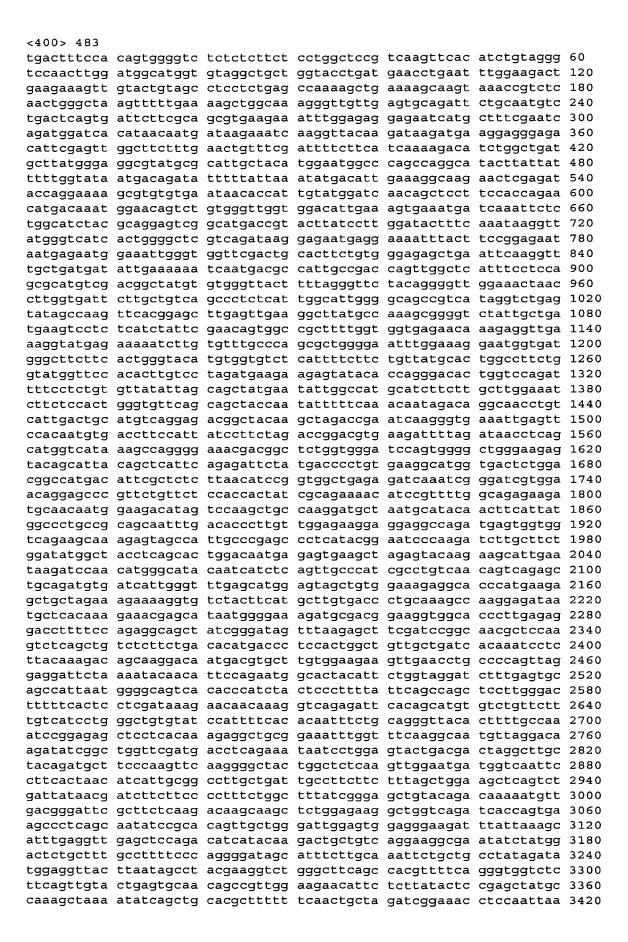
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467

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cagatcaggg cggaggggtg ggctatttca cacacaggca ggtcgggcca caggggtgag 480
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<211> 487
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<211> 471

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344

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<223> n = a or c or g or t

<211> 510

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aactcatctc cgagttcaca cactggggac caagtgcaac ggccaggcaa gattatacag 180

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acaatgacag tgtacatggc tagggtaagt agcgtcacca aagattagtt ctctcgctta 180
cactaagtag gcacgcacat cccaccccag caccgacttc acagtcagct gtaaagagtg 240
gcatttcact ggatgcctcg agagacagtt ctgttggagt atttgagttt aaagactttg 300
aaaggaaaga gaatttggct gaaaagtatc cttttcttta gttaaatcga aacaagtctc 360
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tagtagcatg tctaaaaccc aaactctaaa acgtttaaaa acatttatat tagtttgttc 180
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ctatectgtg agacacccac gtatttattt catggaggac agagttggtc actteeggaa 360
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cagetaqeae tqaateqeaq qqetqeqaca caatqetata etggtqtggt gteagtagea 180
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<400> 698

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aatgatgagt agcaaagggc aggcaggcct gtgcctgctc acatccaagt ggaaacaatg 180

tctctgaggt ggggctgtcc aggtccagcc tgttcaggct tcacagccac acccacatga 240

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ccattaaaag aaaaaaagg agtcataaaa ttatattcac aaatatagta caatatgaca 240
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tactgtttaa tttgaaagta tgaacaatgg tcctactaca gaaattataa agcaccactt 540
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attaqatctt actqqtcctq qttcattcaa tttttaccac atcttqattt gtactggaaa 240
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ctccctagaa aaaggataat attttctgat tgcgcaagca gtttatgagt gtgctatttg 360
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<211> 498 <212> DNA

<213> Rattus norvegicus

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<211> 451
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<213> Rattus norvegicus
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gctgttgctg gaattccagg cgtgtctgcc gattggactc cagcagctcc tggaggcggg 360
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<211> 560 <212> DNA

<213> Rattus norvegicus

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<213> Rattus norvegicus
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caaccetgtg acageecaag tagatggtag aaaggeecca gageagggeg caecatggtg 480
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<211> 391

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<213> Rattus norvegicus

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<213> Rattus norvegicus
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<210> 716
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<212> DNA
<213> Rattus norvegicus
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catcccaaga tggccacacc cctaaactgt aaagttcaaa atggtcagta gtatgttggt 540
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<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI101534
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<210> 718
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<212> DNA

<213> Rattus norvegicus

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aaaaaaaacc cagaaactct tcaagtaact aaagataatg ctccaaggcc attttcacag 360
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<212> DNA

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586

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<213> Rattus norvegicus

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agtaagaaaa taaaaagcac gcctttcatt ctgtaaaaca cttacgcgta ctactaatta 180
gaggtaattg tattttttaa caagccattt tacaagttat tttttttttg aattttcagt 240
ctatgcatcc aaaacgagag caaagaacac aactgttatc tttgtaaaaa cactccaagc 300
ttgtatggca aagccgtgta acagatggat aggatggatc tgtagccttc tgacctctgc 360
tggagtatca gggcacccat atacccaatg gaaatcaaaa ccaaaagaga aaaaaaatgg 420
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<210> 786
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<400> 789

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<213> Rattus norvegicus
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gactcaagta acaacacaga tgcttttcac agcatgctga gtgaaatcac acccaaataa 240
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atggatggtc cctactcaag ggacctgagg cgacttggat gatggaaatg ttctctattt 360
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atgggtggct tcattagaac tcatcactgt gcttgaagag gaaacagggc cactaagcct 480
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<213> Rattus norvegicus
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atcctggggg tggggggaat ctgtctcccc accccgggct cctcagatat aaagttttgg 180
caggitating thattateta ggittiggeec accatgicea cittletgiag inggetiggiat 240
cagtacctac ttttctcatt ccagaccagt tcagcaaaca tttctgcccc accccaaatt 300
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<211> 326
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<213> Rattus norvegicus
<223> Genbank Accession No. AI112194
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ccagactgag attectectg gggatttttt acttetgtte tgtgecaeat teetgggtee 180
ttggacatct gctcgtctcc agaatgtacc tgccataaca tagtggcagg aagggggaac 240
atcataagtg gcttatacga gggataggtg ggaaaaggga catttgtaac agccagataa 300
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<212> DNA
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gtoctggaca agataataaa acactogcaa goottotgga toottggact ggttgacato 240
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<212> DNA
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<222> (1)..(460)
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attaacatca aaacaatcat ctatttagat atgcttttct gtaaaaagga aatatattag 180
cagcatttat attttccgca atcacacagc ctacagacat gcagactaac tctgtatcta 240
tttgcagtga tgtagtgctt tgccccgcat ttcgaacacc aaaacccacc tggcagctgg 300
gggttgtttt tattttgtta ttataaaata actgaaaaat aaaaaaggca ttaatttcta 360
caccagttag aaaaacaagt ttttgcactt acctaacatt tgattgtcta aaaaacattt 420
cagtttttaa tctttcaaca naaqaaaqat aaaaatqaca
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<211> 476
<212> DNA
<213> Rattus norvegicus
<220>
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taaaataatc attgagatat atgcttctac ctcttaccga cattttagaa actaccctct 300
acacgtagat ccagttgtaa cacttgacag tagcattatg gagcatggta taactttggt 360
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<211> 372
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<223> Genbank Accession No. AI112926

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ttcatctgct taagattcct ctgtgagagc aaaaaagagt gaagagccaa agaatttgac 180
ggctagaagt taggaattct ggtggctggt tcatagatca caaagtgctg ggagaaagac 240
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aaatgctttc gtctgtgtgg accattatac caatgtggta tgacanacac acacacacct 360
aatangagct aa
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<211> 539
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI112964
<400> 793
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tcaaccattq acctaggtag gtactgagta ttttttttagg taaatcagcc ataatcctat 180
caaatqaaaa actcctcctt cctacctatc tttttatttc ctttgtgcat ttactaaaat 240
tgctccatgt ctagacacta aaacaattca cctccacagc aaagcttaca aaatttccag 300
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tggctttcag agtctacgta gatttgtctt acagggttca ttcatttaaa agtgcaaggc 420
tgctttagta tccttaatta gtagactgac tttttctgac ttgatttccg atccagttgg 480
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<211> 493
<212> DNA
<213> Rattus norvegicus
<220>
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<400> 794
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tagcaagttt agaccacgag ggcgttgtca ctggtaacaa catttgaaaa ctgtacactt 180
gcgaagaaca gcatgttcaa acattagtgt gtctgcatca gtagagcttt tacatgtaac 240
aaacatgctc tttccatgta tgacaaattt aaaaaatatg cattgcttgg caacatgaac 300
taggcaaaaa tatttctttg ttcactgact ttatacaggg aaacaggaca aaagtcatgc 360
atgtacaata cagatgcctg cacagggcat gcaacaaaag gacgcctttt gaaagtccgc 420
ttgcgttagg cataaatatg tgagggttat atattaataa gggaggaagt cttctgttcg 480
ccatgactaa cat
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<211> 461
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<220>

<212> DNA

<213> Rattus norvegicus

<223> Genbank Accession No. AI113008

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tgtaccagac tctggagagg gtctgccctg agcgcgtggt gattgctctt gctgttctag 180
taggcacate gatgttatag tattgatett tggaaaagge gtagtaatea tageegteag 240
gttttctaat gttgggcagt gttatcgcgg aagtaacgac atttgggaac cctctccaca 300
gtgtgctcac cttgtcttca ttgtggagga agcctttgtc ttgataagag gctttgatgg 360
gcaccgagta atggatcctg aaggtgtgtg tctggaaagg tccaacagca cgctcaaagc 420
ggcgcctcct gacctgtgct gcctgcccca tacactgagt a
<210> 796
<211> 492
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI113046
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<221> unsure
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tactttttga cccatccccc atccataaat cccactgaaa ccaatacctt ttggtattct 180
aaaattcctt ccattcctga ttttcatcag tttttattga gtactagatg tggaagcatg 240
aaaatgtaaa aaaatgatga ctgaattaat gagggaatgg tgatgggtag atatgaaaaa 300
aatggtttat tgatcaaatc tctggaaata caaatacact gtttttcttg ggaagtcctg 360
aggtcagggc tctggcgaaa cacttcttat tcactgcgtc ctcaggcatt tccataatct 420
gtgctgcang gagcgctgta ttttgcaact gcaaactcat ctttctcata gtaatcgtag 480
actttcacta cg
<210> 797
<211> 346
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI113055
<400> 797
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taccccatqa ttattcaaac aggaaacaac ctgcaatttc cctggaaaaa ttcccggtgg 180
ggtttttaac tacttcatta caattatgaa aaataaacag gccacctgtt taaaaaaaata 240
tccattccca attttcaaaa aaaaaaaaaa aggtcaacct tgtaccttca aaactaggta 300
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tcaaaacttt aggccagggt atggaggagc aatcccttac ttctac
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<210> 798

<211> 424

<212> DNA

<213> Rattus norvegicus

<220>

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cgaggacctg acgcaggcaa aacccattta tggtggctgg ctgctcctgg ctccagatgg 240
caccgacttt gacaacccag tacaccggtc acggaaatgg cagcgacgat tcttcatcct 300
ttatgagcat ggcctcttgc gatatgccct ggatgagatg gccagacctg tgccctcagg 360
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                                                                   424
gccg
<210> 799
<211> 380
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI136514
<400> 799
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acttgatgaa gtacacagtg ggcttggctt caacctggtg tatgaccatg ccaactctct 180
tggagccatc atctttggtg tattccacgt gtttacctat cagtccatcc accagctcca 240
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<211> 352
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AI136630
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atgcagactg cettagacae teagaaeget caaagteagg agaegtaaga aatgaaaagg 180
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tgtagccggt gagcacgaag aaggccaggg tggaactctc caccaagagc tggtacagcc 300
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<210> 801
<211> 282
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI136702
<400> 801
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282
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<223> Genbank Accession No. AI136714
<400> 802
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catgaattta ctgtacaatg acagtgtaca tggctagggt aagtaacgtc accgacttca 180
cagtcagctg taaagagtgg catttcactg gatgcctcga gagacagttc tgttggagta 240
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ttaaatcgaa acaagtctcc agtcagcacc cagtcaaaca cagtgctttg aactttgggt 360
aatttgtcgg acagtatact ccacgccact gtggaactct ggagaacgga aagggcttgg 420
cacageeteg tgeeg
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<211> 475
<212> DNA
<213> Rattus norvegicus
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tctagctttc tttataaggt tcaattatct tctttttaca ttaggattat atctaaacag 180
atcatcagca agagagtett etttegettg ttgtttetgt acctecattt catgttteaa 240
ccactettet aatteagtat tetttegage atggtgacet attaaatetg atcetecaat 300
aatgtgtgga agettteetg etceaggaca egtageette ttgaatttet tgaaattett 360
cagttcacca cgaccattta gtgggcacag atttctggaa gagttattat ggacaaccag 420
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<210> 804
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<212> DNA
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tcctggcatt ctgtccaccc agagaaagac agatttgctc acgctcactg caggcgatgc 300
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tggccctgcc gagcaactag cacacataga cataaggtct aagctggcca aggccagtga 360

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gagaatggat actggttcag gagggcagct gaacagcaag agccacagag agagagatta 420
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<213> Rattus norvegicus
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<223> Genbank Accession No. AI137345
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<210> 806
<211> 392
<212> DNA
<213> Rattus norvegicus
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accaaaccca aatctttcac agaacagcaa atactcttaa tctctgagcc tcttcatgtt 180
tottaaatga acaataacco ttttgtotao tggcccagag aggctggggc cactgatota 240
acgtggaccc accatattgt gctgcacgag gtagcgaatg gtctcccgga tgccagaact 300
gatgaggttg gacgtatagc ccaagaaaat ggtgcagcct gtgagtgggc ggcggctctg 360
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<210> 807
<211> 540
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI137406
<220>
<221> unsure
<222> (1)..(540)
\langle 223 \rangle n = a or c or g or t
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ttccttttat tttaqttaqa tgttttqaat qcctacaqta aatctqccca ttccqqqaqq 240
tegeagacet cetggeetee ceceaagtet atgateteat ttteacagat aaacacecae 300
ttctcagacc agctacccaa agcatgcatg ttctcgagtc ctttgcaaac cggttatttt 360
gtctacataa cctcctcata tcccttcctc acattcttcg taggcagatg ctggagctgt 420
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tgctctaacc tcctgagata tggtggcccg ctgggggagt ctgtttggct tcatttgacc 480 ttcncatacc agctcncacc agtccagccc tttctctgag gaacctggag aaaaattagc 540

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<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI137420
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<221> unsure
<222> (1)..(519)
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catcqqcaqa ctcaqaqqcc aactqcatcc tctcatgqtc ctgatgctca ttcccaggcc 240
tggcggggtc agagctgtcc tgtgggctgt catgcagctc ttctgaggag ccacccctgg 300
ggccatcete caagteetge negtetteet gtgeteeate ttetgtgtte tetecettet 360
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getetetggg ageetgetee caggetgtte etceaettet egeateggee egttettete 480
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                                                                   519
<210> 809
<211> 416
<212> DNA
<213> Rattus norvegicus
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<223> Genbank Accession No. AI137468
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<221> unsure
<222> (1)..(416)
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<400> 809
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qcctqqqqqc caqcacagqa acagtqagaq qtggaagagt tggggcaaat ggagaggagc 180
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gaatetgeat tetgacatgg gaccaaattg etteagtgge aageggggta eeettggeee 300
gcaccccagt tgccatcctc acaaggtene cagetetgee aegtecagea gtegetgten 360
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<210> 810
<211> 432
<212>-DNA-
<213> Rattus norvegicus
<220>
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<223> Genbank Accession No. AI137488

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gatgaagccc accagacatc acaaacaact gcaacaggtt caccggcagg cagcacaggc 240
aatgcctcat attcagatct tcacagttgg gcatagtatc ttgtacactc tggtgaaatg 300
gttctcacag caggagcatc acagccagac tggacattct ctcaaagggg tacgagttgc 360
aqttctqaaq qcccctggct ttggttgttc acaaagttca gtcctgttta ctgtgatcct 420
tgcctcgtgc cg
<210> 811
<211> 490
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI137506
<220>
<221> unsure
<222> (1)..(490)
\langle 223 \rangle n = a or c or g or t
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gggttgacta ctttccctag gaagagcagg ctctgggtgg tcacctccca nagcagaagc 180
aggaagggcc tgttaaagtg ggcgtgtggg gctgacgtca tgttcaggga tgggggctgg 240
gagagcaggc canaggcagc tgcggcctca gttcccttct cgttcatgtc cacgacggcc 300
ttgtgcgata ccctggagac agttttgttg agctgcccca taattcctga taggtcggct 360
tccacgtcaa agaggctgct gaggccaacg aggggcagga tctcttccag gttgtaggtt 420
gcagaaactg aaaaccgtgg caggtgcaaa tccaacagac tccacgtntg agtcatctgc 480
aggtgcttca
<210> 812
<211> 522
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI137572
<220>
<221> unsure
<222> (1)..(522)
\langle 223 \rangle n = a or c or g or t
<400> 812
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ggaagactga caagaatagg ggctagggat tctccagaag tctcaggctc atcagctggg 120
gtgagttact gtaacctccc ttacaatcct ggttcttcac aacaagtcgg gcagtggttt 180
tccaaaccgg accgcgaagc ttctcatggt tcatcagggt gttccattaa acatgcacgg 240
caaaaaggcc-gttttctcgg_cattaaaaac_agcaaaaggc_agggagtggg_gaggtgtatg_300
tgttcttana agtcaagaga ggtgtcacgc cccgagggga ggagaacgtg agtctgtgct ,360
ctcttttact ttgggttggt gaatcccagc atacattgtt cagccagccg gtgccaccgg 420
atgcccggaa cctccttggt gagggagtgt ctgacctctc accatgcatc gagaaaattc 480
cgttgtctct taagacatct cagcttccat ttggatgagt tt
```

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<210> 813
<211> 415
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AI137586
<220>
<221> unsure
<222> (1)..(415)
<223> n = a or c or g or t
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gagttgagct atgcattcag tccacaatcc tccagaagtc tgtacttggc gaactacatt 180
ggccaggcgt ttggcacagg ggtcttcatg tttgatggcc tcatgcattt ctccttctgc 240
aattatactg aatattttcg gtagattggt attatttggg ccaagaacaa ttggatgatt 300
actttcaatc aggtcacaca ggtaactgaa ggtctggaca gcttcttctt tatcttcatg 360
tanggggagc cacgacagcc agtgtggtaa gacctcctcc acattcacgc agtca
<210> 814
<211> 607
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AI137761
<400> 814
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accagtgata attctgcagg aagagtagca accttttaaa taaacaaggt cgtaagttag 120
tattgcaaca gtactttggc ctatggagtt tgataggatt attgcgatca gtcttatagt 180
attgtagact gtgtgtcctc tatgtctagt aataaaaata ttcctctgac ctcagtgact 240
caccacacac acatatttct accctatgtt gagcactgcc cttttaggtt gtactaaatg 300
agagaaaaag tttttgctcc tgggttttcc aagagtatac agagatagca gtcacttcca 360
cagtgaggta caatattaaa ctttgagttg aaaaataaaa cagtatccta tttatgccct 420
ttctctagga gtaaaaagac acacacaatt acaaacataa aatgaatcaa agttctattt 480
tattgacagg agtccaaatg agtataaacc tgcctccttt gtatgctgtt tactgccttt 540
aaaaggctgc tgacagagtc aggtagatta aaagctacga atgtattcag cttttatagt 600
gaacctt
<210> 815
<211> 384
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI137856
<220>
<221> unsure
<222> (1)..(384)
<223> n = a or c or g or t
<400> 815
eggeegecat tetegeetge tggtteettg geeegaagee agetagtgge caccecettg 60
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ttcactcggc cagacttcgc ttcgtactcc acggccacgg cacagatgtg cacggagttg 120
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tcacacaggt ggtcgatggg tggccgcagt gatgggtant cttggaggat ggctaggatg 240
tgcctccggg cttccaccac ccagctcagg tacagctcct tgccctcgcc tgaggatgac 300
gccatcttgt gcaggtgctc ctgctccgag ggctctgagg cgtactgtgc cagttcgtag 360
agcacattgg tgcgtggcgg gtta
<210> 816
<211> 425
<212> DNA
<213> Rattus norvegicus
<223> Genbank Accession No. AI137988
<400> 816
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aaatctctaa qqqqccccaa cacaaatgct gaggctttaa tggaatttac acattgcttt 180
gtccctagtt cataaaggtg aactgaacac agcacctgta agtgacagca gttgtaacca 240
gaagaagaat ctggactcgg acttttattt ttatatggaa agaatataaa ggtgggccaa 300
atgagectae teacaaagaa agaagttaee ttggeettat eeetcacaga cagetaaggg 360
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tgccg
<210> 817
<211> 401
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI138034
<400> 817
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aagacagttt attataaatt tggactccta cagttctggt gtggcgcctc gacatttaca 180
qtatttctta ccattttatc ttcactccaa acttqctaaa caaaqaqttc ctctccqcac 240
cctcgaggct tcgctttaag gaaatacttc acgaccacac gaaacccaca cacacagaac 300
atttqttttt tttttttaa aaatatttac agaaqtctgt ccagccattt qqattttqtt 360
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                                                                   401
<210> 818
<211> 511
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144585
<400> 818
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ctagagtctg taaaattcta aatcttgcgt gctgtggcac agaaccagta gcttcccact 180
ttttcccttc tccccaggtc acatggggaa agagggcaca aactgacaag acttgatcac 240
ctccaaatga caaaattgca aaatcccaaa ctcccagcac ctgaaactca ggatatggag 300
accttccagc tcagatatat atttttaagt ttctgctttg ccacaactgt ttgtcaccaa 360
attctggaag ctattgtctt tacccttatt aaaaacaaaa acaaaaccca tttataatct 420
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caattettee aaatggteag aattttgate tattetgaaa tteaaattee eeagtteatt 480
tttacccctt ctctcaagac ttcctcagag g
                                                                    511
<210> 819
<211> 576
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144586
<220>
<221> unsure
<222> (1)..(576)
<223> n = a or c or g or t
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gtgccctcac atatgctagg aattttagtg ggcactctgg cctctgagcc agagatttta 120
qcttttctat tqqcaattqq qacaqactqa tqqaataqtt tqqaatqqqa tcaaatqqaa 180
agattgcttg ccacctacag acaggcacat gagagattcc ccaagctggt gccaaggtgg 240
gtcaggccct anagcaaaat aattccattt ccctccagag tgaaggaaga gaaaaagctt 300
cagatgttaa cagtcaaagt cagagctgag ctcctgggat cagaaaggca tttcctaatg 360
gaagcaactt tgtaaggcca gaggtcccaa agagctcacc tgttccacag ctaggaaacc 420
ttanggttag ctgaactatc ataaggaagc taccaagtgg ggaaaaggtg ccaaatgccg 480
tgttctggat aagggtgtat gttctgccag tactaactag acaagcaaag tattcattat 540
agttgaaatc cagaaacttc ataaaaagcc ccatca
                                                                    576
<210> 820
<211> 374
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144612
<220>
<221> unsure
<222> (1)..(374)
<223> n = a or c or g or t
<400> 820
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tcatcttcca aggacacagt ataattctta acagtgaaaa taagcgaaat ttctgggtaa 120
acataaattc aaattttatg tcaaattttc atggttctag ggacgatgtg cagagcctct 180
ttacagetet tteettttte atetaaaage aagagtaata acaccataat aacatttett 240
ctttacagga tgagcaacat ggctccccca ggcagtcatt cgttagcttt ccattattaa 300
cccgagaatg ggtgtgtcnc taactatgaa gacagctcac aatttcttta agatggagta 360
gagacatttt actt
                                                                   374
<210> 821
<211> 510
<2.12 > _ DNA -
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144741
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cggtgacaac agtcaggtcc tgattatatg gactaatgac ggggaacggt aacacagaga 240
atgcagaacc cacactcaaa cgacccagag tatgctacta tacatccaac cacaagactt 300
ggaacattcc ggtgaagtga agcaggctca gagctctgct tcagcaagat caagtatctc 360
ccagatggcg tccgcaagca caccgctccc aaagctcctc ccagccgaaa gagggcctgg 420
gagacccaga aacctcaacc ccaaagataa tagccagcat tctcgaaacc agtctttctg 480
gctccaaagt tcctggtgaa agggacgtgg
<210> 822
<211> 588
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144797
<220>
<221> unsure
<222> (1)..(588)
\langle 223 \rangle n = a or c or q or t
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aaaaatactg cccatattca ttgacatgtg taagccccag ttgaaataat tttagttcct 120
tttgtattaa aacactaaat tgagatggat taagtcaggt ttgtaccatt taaaacaaat 180
ataaaggtaa gagtaataat ttatcaaacg tctctaatgt ttacctcccc tgtgcccaca 240
tctctttqca caggtatctc aaccacagac agtgcaatga aacctgtcgt tactgtacac 300
agagccacgc agtggctaat tttactctta aatcattcag caaatgagat catctattaa 360
aaaaaaaat acctcgcccc cctttaacat catttgaaat tacagaataa atgctgccac 420
tactagaaaa ggaatgatac gacctggaag aagatcagat tagaggttac catttcctct 480
cctccctcca tcactacggc aaggtcaagt acattcacga aagccgtcct cactcccgtt 540
acccagacgc atctgtaaga cagggcggca cacgagggcc tgcacagc
<210> 823
<211> 488
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144832
<220>
<221> unsure
<222> (1)..(488)
<223> n = a or c or g or t
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aaaaagcgaa cagtagtaac gtctactttg gtaaaaacag tccccgatct tggggggcta 120
catectetgg_acgggettta_ttcccagtat_atcgaagect_ttggccatga-cagcagetac-180-
ggcttcacac aggagcatcc gccacatgtt caccttcagc actttcccag tctgccgatc 240
tttctccaca cagtagcagc tgtcatagaa ctctgtgaaa gtggttgcta gctcataaat 300
gtaatcacac agagtgtgga gaaacaggtc atctaagatc ttctgtagga tttcggggaa 360
ccgtaaaatg caccgtccca gtttccactc cttctcgtgg tccaaaatga tcttggtttc 420
negagetget etetgeagea ttteeteate gatattggee aggegtgeaa tggaeetgat 480
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<220>

<223> Genbank Accession No. AI145095





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488
tctggtga
<210> 824
<211> 512
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI144936
<220>
<221> unsure
<222> (1)..(512)
<223> n = a or c or g or t
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qtaatqaaaa aqqcaagttg cattcataaa agatggcatt catgttcatt ttagaaagca 120
acaaaqtaga tqtaaaaaac tgcttaagtg aaaaatgtaa tatcgcagtt ccattttata 180
agctgaaaaa tgattttatc aacatttgca taaaatctgc actttatata ctgcatgtta 240
ttaaaaaatt ccaccactaa attatgactt ttgcaaattt aggcttacat ttatactgtt 300
qctqqtqtat atqtaqtaqa tatqqaatqq atattttttt gtttaatagg caacatcctt 360
aaacaataga caacaatttg gaaaattaca gacattttga cagctcaaaa attattattc 420
acatcatage aatacggtcc tactgttaga tttcttgcca tcttctgaca taagagtagt 480
taanatatag tgctaggaat gctggatggc tc
<210> 825
<211> 563
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145081
<220>
<221> unsure
<222> (1)..(563)
\langle 223 \rangle n = a or c or g or t
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gggaaaactc tctataaaga aagttaagtc caggtgctat aaaaatcctt agcccttcac 180
atcacaataa aggatgtatc tcggccaatt tgttacctcc acgcacataa ttagacatac 240
agcatgcatq qtactcttaq ctctatcccc agccctgcag cacaacanag gaaaagcccc 300
cagattaaaa aaaaaaaaa aaaaaaatcc aaaactgggc ttaggctctt tgcatttaaa 360
caggtaagat gcaagctgct taaaaactat ggcatattga aaatataacc tctcctgtat 420
atgctgatat aatttaaaat ttaaaggtga aaacatacat ttactaacaa aacacatccc 480
tatagaaaat gtttatatag tggaatactg cctttcagac tccatttgca tcagtaacaa 540
tagtgactga ctctagtcca agg
<210> 826
<211> 443
<212> DNA
<213> Rattus norvegicus
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taattgtaca ctcattgtgc ttagtctgta aagttgtatc ctcagctcac ccataacctt 180
cccagaatag aacactctgt catacattaa catagagcct tcaaaaaggta tacacaaggc 240
tcaactctgc aggccatacc agatgctgtc ccatccacta gacagtttaa gagggacaca 300
qcaaqqqcca tqcagacccc atctcaaaca tcccagtact aatactctgt atttgcttct 360
tgtgtctgct ttttctgaac atcaccacat ccagttttcc ttcgcaagaa gtctcctctc 420
                                                                   443
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<210> 827
<211> 556
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145385
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gaagctactc atgacagtgg cagcagacaa cattctctga actgacaatc atgatggctg 480
gatcatccta gactttgttg atgctaaagg atttcttaga gaaaaccctg attcagaatg 540
ctgtgagcag ctgtca
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<210> 828
<211> 567
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145556
<220>
<221> unsure
<222> (1)..(567)
<223> n = a or c or g or t
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tatagagttc tgcttcttac atgcaaaact ggtaaccaag tcaggtaaag aaatacttat 120
agagagagag ttctggatga tatctttccc ctctagttca atgtgctaag actgagacag 180
aagcagaatt tgtttctgtc aagggcaggg agggcaggga ggcaagggag ggcaaagata 240
ggacctcact aggtaaccct ggctaacttc aaactcagag atccagcctg ccactggcct 300
accaggttct aggagtagag gagagcgcca ccacacccag tctgtttttt gagacaaagt 360
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taccaggatt aaaggcatgg gccaccatgt_tttggatgac_cttgagctcc_tgatcttcct_480-
gcctgnggtc tgaactcaga gctttgtagt gctaagccat aactccaagt ctataagcct 540
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<210> 829 <211> 439

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<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145569
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cgctggcccc acatagccaa ctccaatcag caagacgtcg attagggtcc atattcccag 240
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cgctccaaag cccccaaggg tgatgctcag agccagagcc gtcgaccact tgtagcctcc 360
agtccagttg cagtacagca gtttagggaa agtccggtta cccaagcaat gaatgtggtc 420
gcgcacagtg cagttggca
                                                                   439
<210> 830
<211> 480
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145870
<400> 830
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ctgcagcaat agctcactta acaaaatttt atctgacttt gggtggagga actttcccaa 180
gtaaaaatca actggagtgc tctgtacaaa gctttcctaa tgtctaatct cattaatgaa 240
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tcttattcag ttcagtttta gagaagaaaa ctacaacttc tcaaagttta gtttaacacg 360
gtctcctctt ggcaagcatt agatatcttt agcttgactg ttcctatttc cccctctgtc 420
ccagctcttt tagatcacgt tagttatttt taaggatcca tcttttttga catgtctagc 480
<210> 831
<211> 421
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI145931
<400> 831
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gagcttggct ttcaggcagt tgagtgcctg acatgggtgc tgggaactga acttgggtct 180
ttggcaagag cagtttaggc tcttgaccac tgagctggct ccgcagcctc ccacactggc 240
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ccaggtctat tcccaggagg cctagtggat cctgcgggtc gtgtagtcca gaaccatgct 360
ggccgcacca agcagggccg ggtcaaccaa gtctgaaacc actacatcca catcctgcac 420
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<210> 832

<211> 394

<212> DNA

<213> Rattus norvegicus

<220>

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<220>
<223> Genbank Accession No. AI146177
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qqatatcctq aqqcactcqt qttqaqcctc actcacaccc gcccaaggtt ggaagcttag 180
catggacctg cctcccactg gctcgtctcc tcagtgcccc acccttcccc agaccagaga 240
cttcattaga cagccaaagt tatgaagtga gacagtggac agacatcttg gttcggtggc 300
catctcggca tcttggtctt ttggttcctg tactctcaaa ttgctttcca gagatgggaa 360
                                                                   394
gtgcatcctt tgagggaatg tttaaaagta atca
<210> 833
<211> 520
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. AI146215
<400> 833
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caaacattat gctatagaga tgccaaatga atgaagtttc tttgcctgcc cctgaggagc 120
tcacattcta gtaaaggaca ctttaaaaaa taaaatatac agtacaataa gtgattcaat 180
agaggtaggt tgcaactata atggtgacca aaggaagggc cagggtaatt aatgtcacag 240
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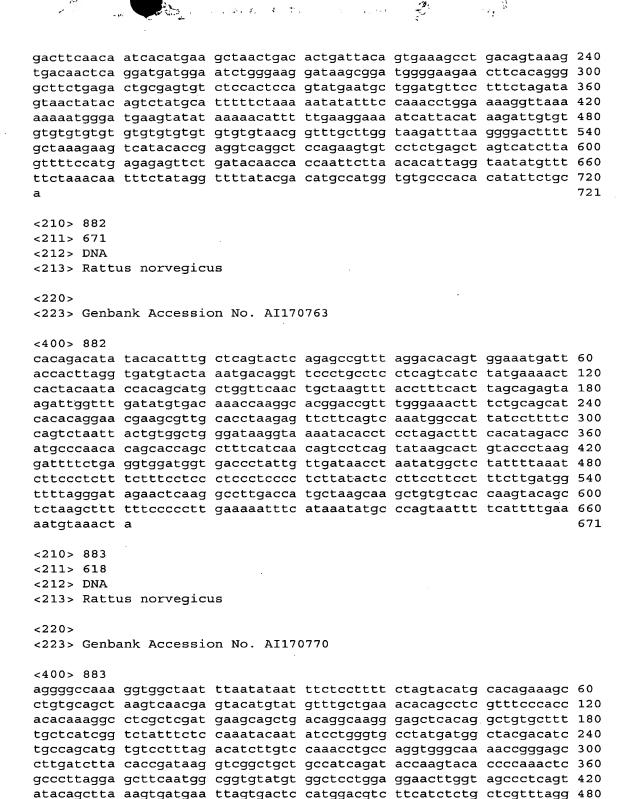
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ggactatgat aagaacatca gctgacttca ggggggcatc agtcaggaag ggtcgtttca 480
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<212> DNA

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aatggagaaa ctgggtggcg gcagcatcgc accatggatg ccaggagctc ttctgccagc 180
tctaqcttca aqtccqqqcc ctqqqqcaa gtcctaacac agcatqqcca catqtqcaaa 240
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cactgataga gaatggagac accttgacct aaatacgaga cctgtttcgt ccaacactgg 480
aattggcttt acactttctt acatccaaca gaccaatcac attctcgtgc ttcatgtgct 540
tcagcagccg cagctccctg taggtccttt tggcgtgaat gatggactga aacggtctcg 600
acaqcttctt cactqccaca cqatqtcccq tctntqtatc aaaagcagca cacaccgagc 660
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ctggtgatgc tataagcagt ctctaagcca acaccagata ctagaaccac caatcttaaa 180
aaaaaaacaa aacaaaaaaa caaagaaagc agcagtctag ggcctccaaa gcacttcatg 240
caagaataac tgcttgtaaa gcaacgggac ctgctccttc tctaagctcc cccttctgaa 300
gcaggataac cccttttgca gggtaagtaa tcacagcact gaaacagagt gcctctcggc 360
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tacaqqaata ttqatqqaqa qcaaaagagc ataatcaaag gcagcagtca actctgaatg 240
gacctgctgt cctctggctg taggccagca agtagcactg ccatcttcta gcttaagaac 300
aaagctcagc agtctacggg aaataggcac ttacacaaaa gtttttaaaa caggagtttt 360
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agaatcttta acaacactct acgtactttt acaaaccaca tttaaaatga ggaatctgta 600
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<212> DNA
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aatttatttt tqqcaatttc atcttagtaa cccgttttat cctattgcca ttgtcccaac 180
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cttgccccat ggccctgcgc ctccctggcc aaacccaaaa ataaatatag tgttattgct 180
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<210> 911
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<213> Rattus norvegicus
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<212> DNA

<213> Rattus norvegicus

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<211> 630
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cacatettgt getggacetg geataggaca ceteceteca ceagggeeat aaaggeeaag 180
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ttaaatgaca tttactatca aaaataggag ttcatttgaa ttactatgaa taacataagc 240
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tqttctqqcc ttcatgcacc gtgatgggct gcttgatggg gaagaagatg gggaaccatg 540
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cagtttcaaa gtagcctgca aagccatgaa gca
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tcattacaga tggtaagaag tcatctgggt tttctgttga ttcaaatgtc ttccgcacaa 480
tcgtcagagg tggatttaaa ctccgaaatc ctccgactgg caatcgtggg ctaccagtca 540
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<212> DNA
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gttcacatgg tcttcacttg attctcacct ttgtcctgat ttcttctgag gatagcagtc 180
atatcagatt aaagcccatq ctaaqqatgt cacttaggta tttatttccc aagacaccaa 240
gacagtcacg ttctgaggtt gtgggaactg ggacttgaac tgaagaacta aagctacagg 300
atttgcctct taagagaatg gaaatgtatt tattgagata atatacttaa tagcccaaat 360
gaacaaactt actgaaaatt ttaaccataa ccgagtaaga tgtataatag attcaaatgt 420
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cagccaaaag gaaatgattt aaggacagag ggtgaataaa gagagcaaag gtggaagacc 180
atgatqtttc aaaqctqqca aqqttqqcct caatttcttt tcttctqtct ggatactggt 240
totgottota ggtacoggag cocaactago atacocagga ttgagaaact tgotaccato 300
aaqqqtqcca qcacaccaac tgtgggagcc gctgttccaa atacaaacaa ctccgagagg 360
aaqtqtccca qggcaaggag gaatgtccac agtgtgatgt gataaagtgt tttgttgtgg 420
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<212> DNA
<213> Rattus norvegicus
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tgcagtttcc cattctcatg tccacgtaca atactgaacc tgcatatgca gtttccttta 180
tcaaqtacaq tqctcacttt tcaqqtcqtc tctaaaacat aaatacaaag gaaaggaagc 240
cactcattaa aaactgcatc aaacacaagt attttaagtg tgaatttgtt gttcctggaa 300
attacacatg cccaaagaaa acaaaagctg gaaaagcggt tacacttcct acatgagtgg 360
acagttacaa caacaatcgt cttctgtaat gagcattttt aatttatcac caactactct 420
qaacttacta aqaqctqtaq tcaqaqtcaq aaqaqaaqac gcagggagag tattcctttt 480
ggaggacaga gtccctccag aatcatcacg gggaaataaa catcctgttg attccgggtg 540
gcaaaacaat taacgttgtc aatctcagtt catgttgatc gtactgagcc gacctaaatt 600
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tctggggatg tcttcacagg gaagagaga ctatgggtgg gctcctgcct gaggtctcca 180
ccctcagccc agcggacata tcacaggcag cttaaaaaaaa aatcctaaaa aaaccaaaac 240
acacatttaa atcctcgtgc c
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<210> 1057
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<212> DNA
<213> Rattus norvegicus
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ccqtccacac tgcattcccc tggcaggatt ctgagaacat ttccataaca tacagatttg 300
gcatggctcg gaaggacaga aaacgagaac tgaactaaaa tcattgtaat aattctgtat 360
aaagcataca tagtacgttg tcttattagt tatcaacaac aacagaaaga tttaaaaaca 420
aagaccacct taattatggt gagaacctca tcatagaaaa atgttcatca tttgtatggt 480
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<211> 541
<212> DNA
<213> Rattus norvegicus
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agectetteg gaggegett acqtacacac tgagetecag aaggagaagg atectaacca 180
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<213> Rattus norvegicus
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tggttcaggc aggaaacatt gctgggggcc aggaatgtat gttctgagct ctccaactgg 420
tttgtgctgc ccattggtag ctctggctgt agggcagaca gcttcggctg atgctggtcc 480
tegetgggca aggeaegaat ettgeggtge aacacaacat acteageggg cacacteece 540
ctcgcat
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<211> 493
<212> DNA
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<223> Genbank Accession No. AI179300

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gagegeacaa geegeecact gaagagtgag gegagacaag ttactatggt aacaccagea 480
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cttettttet agetetttae actegeeagt gagggettee tgeteageee tettettetg 240
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gtqttgggga gagcccaggt aggactcagg gctcatacag atgccactgt cactatcaga 480
gggagtgtct tcctccttta cacactgaag ggttagagta atataagcag cagagtcagg 540
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<212> DNA
<213> Rattus norvegicus
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ccagctcctc ttcaaccagc tggatcctgc ggttcaagga ggccacctca gcttcagcct 240
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catcatcage etgetgetge agaacetgga tettgegett tacegeeteg atggtggtge 360
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<212> DNA

<213> Rattus norvegicus

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caggtagaga ggactacaaa taaattataa cctgaagaca tactataacc tgaagacata 240
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<211> 322
<212> DNA
<213> Rattus norvegicus
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<211> 564

<212> DNA

<213> Rattus norvegicus

<220>

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<212> DNA
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acaaaaaata ccattacact ggtagaactg gggaaataac aaaaacaaga cagaaacaca 180
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<212> DNA
<213> Rattus norvegicus
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ctctgccacg agtttgatga actgtgagtg actggcatac agcttgagct ggtcgctgat 360
gtecaccac ttcaccttcc ccgcatcatc tccagcctcc agcgtgaggt tgtccatcgt 420
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531

ctencetgic teatcatggt agticactge etcagtetee atceatgegt tgtcagtgtt 480

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<212> DNA
<213> Rattus norvegicus
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aaccttggat tettgateet eetgeeteta eeteteaagt getgggataa eatgettaaa 360
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<213> Rattus norvegicus
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<210> 1072

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<213> Rattus norvegicus
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392

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579

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<211> 461

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<212> DNA

<213> Rattus norvegicus

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570

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<210> 1352

<211> 654

<212> DNA

<213> Rattus norvegicus

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gcagaactgc gccacgtcat gacaaacctc ggggaaaagc taacagatga agaagtagac 480
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<212> DNA
<213> Rattus norvegicus
<220>
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<210> 1354
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<211> 3225

<212> DNA

<213> Rattus norvegicus

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<210> 1355
<211> 355
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H31144
<220>
<221> unsure
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caaacaggac aagtactggt gccgctgggg tctccctcca cacccggggc ctggggccct 180
ggtccctgcc agagaagatc ctggcgcctc ttctgtttct nagccacttc aggctgttta 240
canttacaaq atctaaqacc aqccaaqccc qaqttcacaq tqaaqccaca qqtcacattc 300
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<210> 1356
<211> 403
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H31287
<220>
<221> unsure
<222> (1)..(403)
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<211> 283
<212> DNA
<213> Rattus norvegicus
<220>
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gaaggtccca acctgattat caaacagccg gatgagttgc tggacagcat gtcagattgg 180
tgcaaggagc atcacgggaa gtctggtctt accaaggccg tgaaggagag tacagttaca 240
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<211> 438
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H31813
<220>
<221> unsure
<222> (1)..(438)
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gaggaagagg cctgcaagtn agaggctcag gagaagccaa atcactgaca cccagagctg 120
gttagggtgg gatggacaag atctgagcga ttcctcttct ggaggaggga acgaacagtg 180
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gccttcgtct gcaagcctcc aggatggcac ggaagatggc tgcagccgcg acttctccag 420
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<210> 1359
<211> 275
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H32584
<400> 1359
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ggcttttgct ttttgttggg gtgagagccc tagctcccag ctcccctcac actacctttt 180
gacactaaga cggaaggttt ctaagttgca ggaacaggat gaaaattctt tactaccctc 240
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<210> 1360
<211> 437
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H32867
<220>
<221> unsure
<222> (1)..(437)
<223> n = a or c or g or t
<400> 1360
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caccaacctg gtctactttg gccttctcca gaccttcccc ttcatcatgc tgacatcacc 120
taacttcatc ctgtcatgcg ggctagtggt ggtgaaccat tacctggcat ttnanttttt 180
tgcggaagaa tattatcctt tctctgaggt cctggcctac ttcacattct gcctgtggat 240
aatcccgttt gctttcttcg tgtcactctc ggctggggag aatgtcctgc cctccaccat 300
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gcagccaggc gatgacgtgg tetecaatta etteaccaaa ggcaagegaa ggcaageget 360

<221> unsure <222> (1)..(422)

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tatactgacc ctttggg
<210> 1361
<211> 396
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H32977
<220>
<221> unsure
<222> (1)..(396)
\langle 223 \rangle n = a or c or g or t
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qcataqctqt qqtatcacca tqctcqctct ccccqtcccc aaqqatggca ggacagggac 180
atcagctttc caaaccaaac tgtcatcatt cattgctatc cctttcttta ccatttaaca 240
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<210> 1362
<211> 381
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H33219
<220>
<221> unsure
<222> (1) .. (381)
\langle 223 \rangle n = a or c or q or t
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aggaattgcc ccaaacgttt aaaacccaca gcttgttttt ttgttttttt actgtatata 180
cagcetaaac catagcaate taggattatg teattttaca etgtgcaaaa teetcaaaaa 240
atagtggtat gacagagcag aaagatctct acaaatttca ttttaagaca ttcatataat 300
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acgnectgae agtgateceg g
<210> 1363
<211> 422
<212> DNA
<213> Rattus norvegicus
<220>___
<223> Genbank Accession No. H33426
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<210> 1366

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\langle 223 \rangle n = a or c or g or t
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tggaagaact actgggtgct atcactcaga cccaggtttt tgggagagac agtgtcctgt 180
gtagcctata actgattagg aatttgaatc tcttctgcct ccacctacca catgctggga 240
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acagaagtta aagaaccatg ggaacattac tttggtttca acaggatggt gtttgttcaa 360
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gg
<210> 1364
<211> 569
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H33491
<220>
<221> unsure
<222> (1)..(569)
<223> n = a or c or g or t
<400> 1364
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cagtagetee geatginese tacettitet nactetggee ettigagigt ggeaaateee 120
atagetetga eeeteeaaaa etgttegagg agaaggagga agaggaggag gaggattega 180
gtcttctggt aagcggggag agcgcctcct cagacaggtc tcagctcact ctccgtctct 240
ttagttatgc ttgctcttaa ttttcatgac tttgttgtcc agcatgctct gagcgtttgt 300
nagatgettg atggeateaa acacaaggat geeeggtate accaaccata tggeatteat 360
gataacgaag taggaaccag aaataaaggg ggtgacctag ctctccatgc tggaatccat 420
cgcggagttc ggtcaggaag tacagcacat ccccatatat ctggcccaca gacaccacaa 480
gctgtaggac aaagcggaag ggtttgatga cggagaaagg cgatcaccac ccataggctn 540
                                                                   569
agtgggtccc cagagacaag ctgtgacaa
<210> 1365
<211> 299
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H33832
<220>
<221> unsure
<222> (1)..(299)
<223> n = a or c or g or t
<400> 1365
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tcccttttcc_ccctgccaac_cccatgcccc_caggtcatct_gctatatcta_ctttacgcgc-120-
atnategeea ttetgetteg agtggeggtg ceetteeagt ggeagtgget gtaceagete 180
ttggtggaga gttccaccct gggcttcttc gtgctcaacg gctacaagtt ccagcnggcn 240
ggggggacaa ncccataanc tggcaagttg ccacaacaag gagggatgaa ggagggacg 299
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495

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<211> 335
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H33842
<220>
<221> unsure
<222> (1)..(335)
<223> n = a or c or g or t
<400> 1366
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gaagegeegt ceacegagag cagagaaaaa gaaggeteee aageeagaac geetgentee 240
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tgaggataaa ctgaaaattg cttgatgaag gacat
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<210> 1367
<211> 294
<212> DNA
<213> Rattus norvegicus
<220>
<223> Genbank Accession No. H34047
<220>
<221> unsure
<222> (1)..(294)
\langle 223 \rangle n = a or c or g or t
<400> 1367
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gaccgattcc agccataaag caagctgttg caaaggcagg ctggtccctg gaggatgttg 120
acgtgtttga aatcaatgaa gcctttgcag cagtgtctgc agcaatagct aaagaacttg 180
gattaagccc cgagaaggtg aacatcgatg gaggagccat tgccttggga catcctctgg 240
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<210> 1368
<211> 419
<212> DNA
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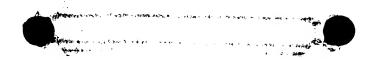
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